

CLAIMS

1. A method of dispensing blended food products, such as milk shakes, in disposable containers having integral blending means located internally of the container, which blending means is drivingly connectable to drive means externally of and separate from the container; wherein the container is made, then nested with other containers and transported to a charging location; the containers are de-nested, charged with product ingredients at the charging location remote from a dispensing location; the container is sealed to seal the ingredients within the container, the container and its contents are cooled to at least a serving temperature, the blending means is releasably drivingly connected to said drive means at the dispensing location, and the drive means is actuated to cause the blending means to operate and blend the ingredients within the container, access is gained to the blended food product within the container whereby to consume said blended product from the container, and the container is disposed of.

2. A method according to claim 1 wherein each container has an upper open end in which another container is nestably locatable and, after de-nesting containers the open end of the container acts to receive the product ingredients, said open end being sealingly closed after charging the container with said ingredients.

3. A method according to claim 1 or 2 wherein the container has a lower end in which the blending means is located and access to the blending means is sealed at said lower end with removable sealing means.

4. A method according to any one of the preceding claims wherein the container is partially filled with food product at a charging station whereby to provide space above said product into which the blended product can expand during blending.

5. A method according to any one of the preceding claims wherein the sealing means for the ingredients is arranged to provide access to the blended contents after the blending operation, by forming an opening in the seal, or by removing the seal.

6. A method according to any one of the preceding claims wherein the container and its contents are cooled after charging with ingredients and before transportation in a cooled condition to another location.

7. A method according to any one of claims 1-5 wherein the ingredients are cooled adjacent the dispensing location prior to blending.

8. A method according to claim 7 wherein the ingredients are cooled by placing the container in refrigeration means, or by adding coolant to the ingredients prior to blending.

9. A method according to any one of the preceding claims wherein the container, during a blending operation, is located in an upright or in an inverted position, or in positions intermediate upright and inverted.

10. A container for use in the method of the invention which comprises a nestable vessel having an upper opening through which food product ingredients are chargeable into the vessel, sealing means for sealing said upper opening and two or more of said vessels are nestable by locating one inside the other through said upper opening, the container having integral blending means including an impeller rotatable relative to the container to blend said ingredients within the container, location means for securing the impeller rotatably in the container, drive connection means associated with the impeller and accessible externally of the container for driving connection with drive means whereby the impeller is rotated, the blending means being permanently united with the container, and the container being constructed to be disposable after blending and consumption of food product from the container.

11. Container according to claim 10 wherein said vessel is of circular cross-section tapered towards one end whereby to locate and nest two or more vessels inside one another, the narrower end of the vessel being inserted inside the wider upper opening of another vessel to extend adjacent the base thereof.

12. Container according to claim 10 or 11 wherein the sealing means comprises a heat sealable member located over the upper opening, and/or a clip-on lid.
13. Container according to any one of claims 10-12 wherein the sealing means comprises a heat sealable member located over the drive connection means to seal the impeller against the external atmosphere.
14. Container according to any one of claims 11-13 wherein the blending means comprises a shaft carrying the impeller towards one end and the drive connection means towards the other end, the shaft being rotatably journaled with respect to the container.
15. Container according to claim 14 wherein the blending means is a push fit assembly with the container body with catch means to retain the assembly.
16. Container according to claim 14 or 15 comprising bearing surfaces defined between the body of the container and the impeller shaft.
17. Container according to any one of claims 10-16 wherein the blending means is located in the base of the vessel remote from the upper opening.
18. Container according to any one of claims 10-16 wherein the blending means is located on a lid defining a closure means for said upper opening.
19. A container according to any one of claims 10-18 wherein the sealing means for said upper opening defines means for accessing the contents of the container and is removable or has a region which is openable.
20. A container according to any one of claims 10-19 wherein the vessel is constructed to be thin walled, injection moulded plastics whereby the vessel is disposable.
21. Food blending apparatus comprising a container including a nestable vessel having

an upper opening through which food product ingredients are chargeable into the vessel, sealing means for sealing said upper opening, two or more vessels being nestable within one another by locating one inside the other through said upper opening, the container having integral blending means within the container including an impeller for blending the ingredients within the container, location means for securing the blending means rotatably in the container, drive means, drive connection means associated with the impeller and accessible externally of the container for driving connection with the drive means, a mounting for mounting the container and incorporating the drive means, whereby upon mounting the container on the mounting means in driving connection with the drive means the impeller is rotatable, the mounting means providing a seating for the container during blending.

22. Blending apparatus according to claim 21 wherein the seating has a portion shaped according to the external shape of the container whereby supporting the side walls of the container during blending.

23. Apparatus according to claim 21 or 22 comprising a support for the upper end of the container during blending which is removably engageable with said upper end.

24. Apparatus according to claim 23 wherein said support incorporates injection means for injecting air, coolant or other additive to the ingredients during blending.

25. Apparatus according to any one of claims 21- 24 comprising filling means at a charging location for charging product into the container, cooling means for cooling the container and associated food products, and seal applying means for applying a seal to the upper open end of the container.

26. Apparatus according to any one of claims 21 to 25 wherein the blending means is an assembly with the nestable vessel, the blending means being a push fit into an opening and the inter-engaging surfaces provide the bearing surfaces during rotation of the blending means relative to the vessel.

27. Apparatus according to any one of claims 21 to 26 comprising jug means for enclosing the container in a blending position, and coupling means carried by the jug means and for coupling said impeller and said drive means whereby drive is transmitted between the drive means and the impeller during blending.
28. Apparatus according to claim 27 wherein the jug means includes a handle for lifting the jug means, and the jug means has internal dimensions to receive the container as a fit inside the jug means.
29. Apparatus according to claim 27 or 28 wherein the jug means comprises lid means for closing the jug after entry of the container into the jug means.
30. Apparatus according to any one of claims 27 to 29 wherein the coupling means is located in the base of the jug means or in a closure member for the upper end of the jug means.
31. Food blending apparatus substantially as described with reference to the drawings.
32. Food dispensing and blending container substantially as described with reference to the drawings.